Idaho's Charter School Students' Achievement

A Report

Completed by

Frank Gallant, Ph.D.

August 2004

Idaho's Charter School Students' Achievement

A Report

Completed by

Frank Gallant, Ph.D.

August, 2004

Executive Summary

The ISAT mean scores for each charter school are listed by grade.

Table 1

ISAT Mean Scores For Charter Schools

Charter School	District	Reading	Math	Language
ANSER Charter School Gr 4	Boise	221.52	219.57	217.48
Blackfoot Charter Community Learning Center Gr 4	Blackfoot	189.88	205.38	195.63
Coeur d'Alene Charter Academy Gr 8	Coeur d'Alene	230.27	241.45	232.37
Coeur d'Alene Charter Academy Gr 10	Coeur d'Alene	238.29	260.26	236.53
Hidden Springs Charter School Gr 4	Boise	212.50	225.46	213.69
Hidden Springs Charter School Gr 8	Boise	231.50	239.83	228.44
Idaho Leadership Academy Gr 10	Snake River	229.79	245.37	227.47
Idaho Virtual Academy Gr 4	Butte	207.58	209.83	209.49
Idaho Virtual High School Gr 10	Mountain Home	No Data	No Data	No Data
Liberty Charter School Gr 4	Nampa	210.72	225.69	210.97
Liberty Charter School Gr 8	Nampa	229.42	243.90	229.68
Liberty Charter School Gr 10	Nampa	231.46	252.00	228.00
Meridian Charter High School Gr 10	Meridian	236.67	259.29	234.80
Meridian Medical Arts Charter High School	Meridian	No Data	No Data	No Data
Moscow Charter School Gr 4	Moscow	213.55	221.60	212.90
North Star Charter School	Meridian	No Data	No Data	No Data
Pocatello Community Charter School Gr 4	Pocatello	208.89	217.53	211.11
Pocatello Community Charter School Gr 8	Pocatello	223.93	224.80	221.67
Renaissance Charter School Gr 4	Moscow	215.67	214.83	213.17
Renaissance Charter School Gr 8	Moscow	221.38	227.13	218.88
Renaissance Charter School Gr 10	Moscow	227.00	241.63	222.50
Sandpoint Charter School Gr 8	Lake Pend Oreille	218.17	227.67	213.83
White Pine Charter School	Bonneville	No Data	No Data	No Data

The following table lists the ISAT "cut scores" as approved by the State Board of Education (SBOE). It provides basic, proficient, and advanced scores by subject area and by grade. The mean scores from Table 1 can be put in context by comparing them to the scores in Table 2. The Table 1 scores can be compared among the charter schools in similar subjects and in similar grades; Table 2 scores can be utilized to gain a "point of reference" regarding basic, proficient, and advanced levels.

Table 2

ISAT RIT Scores by Grade and By Subject

READING	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
Basic	174	185	192	198	203	207	210	213	216
Proficient	182	193	200	206	211	215	218	221	224
Advanced	193	204	211	217	222	226	229	232	235
LANGUAGE	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
Basic	176	186	193	200	204	207	211	213	214
Proficient	184	194	201	208	212	215	219	221	222
Advanced	197	207	214	221	225	228	232	234	235
MATH	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
Basic	174	185	194	202	208	214	222	229	231
Proficient	185	196	205	213	219	225	233	240	242
Advanced	201	212	221	229	235	241	249	256	258

Note: Approved by the State Board of Education March 6, 2003. From http://www.idahoboardofed.org/

Appendix B reorders the charter schools alphabetically by grade, and might provide a more direct comparison among them.

In the body of this report, the *Report Detail* section makes statistical comparisons among the different schools, and provides reasonable answers to many questions. Viewing mean scores from the charter schools and comparing them among themselves and to the SBOE approved levels is valuable, but that process does not provide confirmation and definitive answers to questions posed in this analysis. The following sections will provide answers to significant questions.

Introduction

Idaho Code 33-5202 provides the legislative intent for Charter schools. This report will examine one aspect of the intent legislation:

Are charter schools improving student learning?

This research was conducted by comparing the academic achievement of charter school students to that of students in the traditional public schools. In the past, researchers have felt compelled to compare students on the basis of similar socioeconomic (SES) backgrounds. In fact Coleman (1966) believed that SES factors could not be overcome, and that they played a very important role in determining children's potential success in life. This student database does not contain any data that can be used to determine family income, parent education levels, or other information that might lead to a categorization by socioeconomic status. Most importantly, the No Child Left Behind law does not allow accommodations based on SES, and much current research (The Education Trust, 2004) sites the fact that schools can and are overcoming SES disadvantages and are reaching similar achievement results among all SES groups. Consequently, SES is not used as a disaggregating factor in this analysis, although mention is made of its existence.

A major component of charter school legislation was to provide unique methodologies for student learning. Mauer (2003) found commonalities among charter schools and consistent above average scores on academic assessments. Miller (2003) found that there were no differences in achievement among four sub groups (i.e. racial minority, English language learner, free and reduced lunch, and special education) when students in charter schools were compared to students in regular public schools. The question now, in the current context of legislative and national political directions, is to determine exclusive of various racial and socioeconomic differences are charter school students obtaining higher achievement than students in the traditional public schools (TPS)?

This analysis is based primarily upon the Idaho Standards Achievement Test (ISAT) (Idaho State Department of Education, n.d.) scores in grades 4, 8, and 10. (Data for grades other than these three is not available.) The measure of ISAT achievement is a RIT score (Northwest Evaluation Association, n.d.). Most essential to understanding a RIT score is to realize that it is a continuous score. That is, a specific score is meaningful in terms of achievement regardless of a student's grade level and provides an objective measure of student knowledge. (Northwest Evaluation Association, n.d.).

Charter schools continue to increase in number and in the number of students they serve. Currently there are 15 charter schools in Idaho. (Renaissance Charter School has recently closed.) Idaho's charter schools are listed in Table 2:

Table 3

Idaho's Charter Schools

School	Grades	Enrollment	Inception
ANSER Charter School	K-6	145	1999
Blackfoot Charter Community Learning Center	K-5	60	1999
Coeur d'Alene Charter Academy	6-12	398	1999
Hidden Springs Charter School	K-9	371	2001
Idaho Leadership Academy	9-12	180	2002
Idaho Virtual Academy	K-5	2,000	2002
Idaho Virtual High School	9-12	296	2002
Liberty (Nampa) Charter School	K-12	370	1999
Meridian Charter High School	9-12	185	1999
Meridian Medical Arts Charter High School	9-12	135	2003
Moscow Charter School	K-6	120	1998
North Star Charter School	K-8	265	2003
Pocatello Community Charter School	K-8	183	1999
Renaissance Charter School	K-12	54	2001
Sandpoint Charter School	7-8	135	2001
White Pine Charter School	K-6	188	2003

Note: No data is currently available for the three charter schools in yellow. Renaissance Charter School is no longer in existence; however data is available, and it is included in this analysis. From http://csi.boisestate.edu/icsn/idaho_charters.htm, "Idaho's Charters."

In statistics, researchers make conclusions that often seem to be shrouded in non-intuitive wording. In a layperson's view two scores can look different; however to a statistician they might likely be the same. The science of statistics considers the fact that data may have been gathered with less than full accuracy. Instruments may measure inaccurately, humans may vary in their collection techniques, or any number of factors could introduce error into a score. Thus a statistician might say that two scores are the same even though they are numerically different because of the potential of measurement error. To the question, "Are the scores different?" A statistician might reply that, "I am 95% sure the scores are actually different" (Huck, 2004). The conclusions in this report are entirely dependent upon statistical hypothesis testing. Terminology such as, "The null hypothesis is rejected at the .05 level and significant differences exist between the charter schools and the TPS scores," is not used. When statistically significant differences are found in scores, this report states

that the scores are different. If the differences are not significant, then the scores are reported as being the same.

Description of the Sample

For the first time in this state's history individual student data is available from a single centralized repository. Using individual student data from school districts across the state allows researchers to obtain a level of specificity and preciseness that has not been possible previously. The sample of ISAT scores from the spring of 2003 contained the following data:

Table 4

Sample Composition

Category	School Type	Cases Valid (N)	Percent	Missing N	Percent	Total N	Percent
Reading	TPS	52,400	93.2%	3812	6.8%	56212	100.0%
	Charter	527	83.3%	106	16.7%	633	100.0%
Math	TPS	52,400	93.2%	3812	6.8%	56212	100.0%
	Charter	527	83.3%	106	16.7%	633	100.0%
Language	TPS	52,400	93.2%	3812	6.8%	56212	100.0%
	Charter	527	83.3%	106	16.7%	633	100.0%

Note: TPS = traditional Public School. From the Idaho State Department of Education, 2004.

The sample data for the TPS contains 56,212 records comprised of 4th, 8th, and 10th grade students. Of these records, 52,400 were available for the statistical analysis. There were 633 charter school students in the same grades, of which 527 could be used in the analysis. A larger percentage of charter school student records (16.7% compared to 6.8%) could not be used.

Table 5

Categorical Representation

Type of School	Limited English Proficiency	Special Education	Free & Reduced Lunch
Charter	.2%	7%	17%
TPS	5.1%	11%	33%

Note: From the Idaho State Department of Education, 2004.

The sample can be disaggregated as in Table 5 to reveal that statewide, only one charter school student, .2%, identified himself as an LEP student, compared to 5.1% in the TPS. 7% of charter students identified themselves as special education students, compared to 11% in the TPS; and 17% of charter

students identified themselves as eligible for free and reduced lunch, compared to 33% in the TPS. In each of the categories above, charter schools are underrepresented. That is, the TPS have higher percentages of more challenging students, and thus face more obstacles in obtaining higher ISAT achievement.

Table 6

Gender by School Type

Gender	Charter	TPS
Female	51%	49%
Male	49%	51%

Note: From the Idaho State Department of Education, 2004.

Characterization by gender is approximately equal between the two school types. Additionally (but not shown in a table), there are 1,305 migrant students (of which 1,175 records are statistically usable) in grades 4, 8, and 10 in this sample. However, there are no migrant students in charter schools. All the migrant students are in the TPS group.

One final point about the data is that the two sample sizes are sharply different. When an experiment is designed, a researcher normally has the opportunity to choose sample sizes. Those choices will always result in sample sizes that are at least approximately equal. In this analysis, charter school students are being compared to traditional public school students, and the number of students in each group is determined by student enrollment and not by the researcher. Unfortunately, the charter schools had a higher percentage of invalid data which increased the discrepancy between the two sample sizes. Additionally when individual charter schools are compared by grade to the TPS, the charter's sample size is often very small and one student can have an inordinate influence on the statistical outcome.

Methodology

The statistical testing utilized throughout this report is multivariate analysis. This analysis is used because it provides comprehensive conclusions based on the combination of three ISAT RIT scores (reading, mathematics, and language). This analysis is superior to univariate analysis which cannot provide a comprehensive result based on a student's combined achievement in all three test categories. Throughout most of this report, the RIT scores (reading, math, and language) are the dependent variables, and the grouping variable or independent variable is the type of school (charter

or traditional public school). Multivariate analysis considers the three subject area RIT scores holistically, and allows the researcher to consider the overall effect of academic achievement and preparation on the students in the two different types of schools. The dependent variables in multivariate analysis must share a common conceptual meaning and together make sense as a group. That is, they should be highly correlated. Arguably, this is the case with the RIT scores. Multivariate analysis is a strategic analysis that is system based and provides more thorough and robust conclusions (Stevens, 2002). The ISAT data is ideal for such an analysis.

Miller (2003) obtained population data from charter schools. That data was school level data, not individual student data with very different group sizes. That analysis focused on effect sizes, which also are an integral part of this report; however the effect sizes delineated in this report are based upon individual student level data. Although this **sample** of ISAT student level data purports to represent the student **population** of ISAT data; in the final analysis many records were unusable, some schools did not report data, among a host of other potential data problems. Consequently, there is no assumption that the data used in this analysis represents the accurate and complete population of student level ISAT data.

As stated above, the sample sizes throughout this analysis are sharply unequal because a much smaller population of charter school students is being compared to traditional public school students. Even when the analyses are disaggregated by district, the group sizes of the traditional public school still are much larger than the charter school group sizes. In situations where group sizes are greatly unequal, it is critical that the assumptions of multivariate analysis not be violated. Thus verifying that assumptions are not violated is necessary to avoid obtaining biased results (Stevens, 2002).

The three assumptions of MANOVA that must be satisfied are:

1. The observations are independent.
2. The observations are normally distributed in each group.
3. The observations achieve multivariate normality.

Insuring that the observations are independent is a research design assumption and is easily controlled. The ISAT itself is designed such that students take different tests and they work independently; thus this assumption is satisfied. Obtaining a normal distribution for each group is somewhat harder to achieve, and obtaining multivariate normality is yet more

difficult. Once normal distributions are present for each group, multivariate normality is assumed (Stevens, 2002).

Prior to conducting any statistical tests of significance, the charter school data and the traditional public school data should be checked for normality. These data sets are considered normal if the coefficient of skewness assumes a value between -1 and +1, and the coefficient of kurtosis assumes a value between -1 to +2 (Huck, 2004). In the event that highly skewed distributions are evident, a variance stabilizing transformation must be found (Stevens, 2002). Much care was taken to insure that all the sample distributions met the normality criteria. Initial analysis revealed that most of the sample distributions were not normal. An inordinate amount of time was devoted to normalizing the samples. Ultimately all the data, within reasonable bounds, meets the normality criteria. As each statistical analysis is undertaken, the normality of the sample is examined. Concerns about the effect of variant sample sizes between the charter schools and the TPS samples are resolved by insuring that all data meet the normality assumptions.

Report Detail

Six research questions are answered in this report:

1. Are charter school students outperforming regular students when compared statewide?
2. Are charter school students outperforming regular public school students in the same district?
3. Are some charter schools better than others?
4. Are Hidden Springs' students scoring above the traditional public school students in the Boise District?
5. Are ANSER's students scoring above the traditional public school students in the Boise District?
6. Which students score higher: ANSER's or Hidden Springs' students?

Succinctly stated, charter school students are outperforming traditional public school (TPS) students in grades 4, 8, and 10. However this result should be disaggregated and examined in more detail. The second question above considers whether charter school students are outperforming TPS students within the same district.

Table 7

In-District Comparisons of Charter Schools			
Charter School	**District**	**Comparison**	**In-District Charters**
ANSER Charter School Gr 4	Boise	Higher	
Blackfoot Community Learning Center Gr 4	Blackfoot	Lower	
Coeur d'Alene Charter Academy Gr 8	Coeur d'Alene	Higher	
Coeur d'Alene Charter Academy Gr 10	Coeur d'Alene	Higher	
Hidden Springs Charter School Gr 4	Boise	Higher	
Hidden Springs Charter School Gr 8	Boise	No Difference	
Hidden Springs vs. ANSER Charter Gr 4	Boise		ANSER is Higher
Idaho Leadership Academy Gr 10	Snake River	No Difference	
Idaho Virtual Academy Gr 4	Butte	No Difference	
Idaho Virtual High School Gr 10	Mountain Home	No Data	
Liberty Charter School Gr 4	Nampa	Higher	
Liberty Charter School Gr 8	Nampa	Higher	
Liberty Charter School Gr 10	Nampa	Higher	
Meridian Charter High School Gr 10	Meridian	Higher	
Meridian Medical Arts Charter High School	Meridian	No Data	
Moscow Charter School Gr 4	Moscow	Higher	
North Star Charter School	Meridian	No Data	
Pocatello Community Charter School Gr 4	Pocatello	Higher	
Pocatello Community Charter School Gr 8	Pocatello	Lower	
Renaissance Charter School Gr 4	Moscow	No Difference	
Renaissance Charter School Gr 8	Moscow	No Difference	
Renaissance Charter School Gr 10	Moscow	Lower	
Renaissance School vs. Moscow Charter Gr 4	Moscow		No Difference
Sandpoint Charter School Gr 8	Lake Pend Oreille	No Difference	
White Pine Charter School	Bonneville	No Data	

The answer to this question is more complex, but again in succinct terms the answer is most of the time. However in some districts the charter school students scored lower on the ISAT and in others there was no difference in their scores. Table 7 depicts these results by school and district and by grade level. Only two charter schools' students, Blackfoot Charter Community Learning Center's fourth graders and Renaissance Charter School's tenth graders, scored lower than the TPS students in their respective districts. However Renaissance's 4th and 8th graders' scores were essentially the same as the TPS students' scores. Additionally, several other schools' students in

various grades achieved scores that were no different from the TPS students' scores. In ten instances from all the schools across the three grades, the charter school students outscored their counterparts in the TPS schools. Thus this question can be answered by stating that charter school students score higher than the TPS students in the same district most of the time.

The next question is: are some charter schools better than others? This question can be answered only in the context of grades and subject areas, and should be stated as: are some charter schools better than others in the 4th grade, in the 8th grade, and in the 10th grade in reading, in math, and in language? The answer to this question is also sometimes; but in order to be specific, much explanation is required. The following chart depicts 4th grade results:

Table 8

Grade 4 Reading	*N*	*Low*	*Middle*	*High*
Blackfoot Charter Community Learning Center	8	189.88		
Idaho Virtual Academy	118		207.58	
Pocatello Charter School	19		208.89	208.89
Nampa Charter School	32		210.72	210.72
Hidden Springs Charter School	26		212.5	212.5
Moscow Charter School	20		213.55	213.55
Renaissance Public Charter School	6		215.67	215.67
ANSER Charter School	21			221.52

The chart depicts mean RIT scores and is interpreted, in statistical terms, as stating the Blackfoot charter scored significantly lower than all the other charters in 4th grade reading. The highest scoring charter in 4th grade reading appears to be ANSER; however it is not statistically higher than five of the others. The schools in the middle range are not statistically different from one another, but are different from the highest school and the lowest school.

The next chart considers 4th grade math. These scores are closer together and do not depict a large amount of disparity. The Blackfoot charter school is, the lowest scoring charter in this category, but there are other charter schools that also are in this low category, namely the Idaho Virtual Academy, Renaissance Public Charter School, and Pocatello Charter School. These four schools are not different from one another, and in fact are not different from ANSER and the Moscow Charter School. The point is the

scores of ANSER and the Moscow charter are high enough to be different from Blackfoot's charter. Four of the middle scoring schools are not different from the high scoring schools, and in fact two of the low scoring schools (Renaissance and Pocatello) are not statistically different from the high scoring schools. However Hidden Springs Charter School and Nampa Charter School are both higher than all the other schools in 4th grade math.

Table 9

Grade 4 Math	*N*	*Low*	*Middle*	*High*
Blackfoot Charter Community Learning Center	8	205.38		
Idaho Virtual Academy	118	209.83	209.83	
Renaissance Public Charter School	6	214.83	214.83	214.83
Pocatello Charter School	19	217.53	217.53	217.53
ANSER Charter School	21		219.57	219.57
Moscow Charter School	20		221.6	221.6
Hidden Springs Charter School	26			225.46
Nampa Charter School	32			225.69

The following chart lists 4th grade language:

Table 10

Grade 4 Language	*N*	*Low*	*Middle*
Blackfoot Charter Community Learning Center	8	195.63	
Idaho Virtual Academy	118		209.49
Nampa Charter School	32		210.97
Pocatello Charter School	19		211.11
Moscow Charter School	20		212.9
Renaissance Public Charter School	6		213.17
Hidden Springs Charter School	26		213.69
ANSER Charter School	21		217.48

The 4th grade language scores are very consistent. There are no scores that are above the middle range, but there is one school that is lower than all the rest: the Blackfoot charter. One caveat that must be noted is that the categories used throughout this report of "**Low**," "**Middle**" and "**High**" are merely categorizations and may not be consistent with the RIT mean scores as defined by the State Board of Education. Thus a score of 217 is advanced for Language, but it may not be placed in a high or highest category. The statistical placement is dependent upon the scores of the students; however the RIT proficiency scores are defined by the State Board of Education and are not dependent upon the achievement of students but rather are an objective measure established by the SBOE.

Some obvious and broad conclusions can be drawn from the 4th grade scores about the schools. ANSER and Hidden Springs are high throughout the three subject areas. Blackfoot Charter is consistently very low in the three subject areas.

What can be said about the 8th grade scores? Table 11 depicts the reading mean scores.

Table 11

Grade 8 Reading	*N*	*Middle*	*High*
Sandpoint Charter School	6	218.17	
Idaho Leadership Academy	5	219.6	219.6
Renaissance Charter School	8	221.38	221.38
Pocatello Community Charter School	15	223.93	223.93
Liberty Charter School	31	229.42	229.42
Coeur d'Alene Charter Academy	64	230.27	230.27
Hidden Springs Charter School	18		231.5

Statistically speaking, there is little difference in the scores. Sandpoint Charter has the lowest scores, and Hidden Springs has the highest. These two schools' scores are different, but they are the only two that are different.

Table 12

Grade 8 Math	*N*	*Low*	*Middle*	*High*	*Highest*
Idaho Leadership Academy	5	218.2			
Pocatello Community Charter School	15	224.8	224.8		
Renaissance Charter School	8	227.13	227.13	227.13	
Sandpoint Charter School	6	227.67	227.67	227.67	227.67
Hidden Springs Charter School	18		239.83	239.83	239.83
Coeur d'Alene Charter Academy	64			241.45	241.45
Liberty Charter School	31				243.9

The 8th grade math scores are very different and widely dispersed. In terms of the State Board of Education's classification system, the variation is from below basic to beyond proficient. Several schools are statistically different from others. The Idaho Leadership Academy is the lowest, but not significantly lower than three others as the chart depicts. Liberty (Nampa) Charter students scored the highest, but three other schools' students scored close to Liberty's students. For 8th grade language, students from Sandpoint Charter scored the lowest, but three other schools also scored in the same category. A group of four schools is at the highest level, but Coeur d'Alene

Charter is the highest. It is significantly higher than three and statistically the same as three others.

Table 13

Grade 8 Language	N	Low	Middle	High	Highest
Sandpoint Charter School	6	213.83			
Idaho Leadership Academy	5	216.6	216.6		
Renaissance Charter School	8	218.88	218.88	218.88	
Pocatello Community Charter	15	221.67	221.67	221.67	221.67
Hidden Springs Charter School	18		228.44	228.44	228.44
Liberty Charter School	31			229.68	229.68
Coeur d'Alene Charter Academy	64				232.37

Are there some general conclusions that can be made about 8th graders? Coeur d'Alene Charter Academy, Hidden Springs Charter, and Liberty Charter consistently are the best in the three achievement areas. Conversely, The Idaho Leadership Academy and Sandpoint Charter are low.

What can be said about the charter schools in the 10th grade? The following chart depicts 10th grade reading.

Table 14

Grade 10 Reading	*N*	*Low*	*Middle*	*High*
Renaissance Charter School	8	227		
Idaho Leadership Academy	19	229.79	229.79	
Liberty Charter School	24	231.46	231.46	231.46
Meridian Charter High School	45		236.67	236.67
Coeur d'Alene Charter Academy	34			238.29

One interesting aspect of these scores is that even the lowest score of 227 reported by Renaissance Charter is in the proficient range. Other schools are significantly higher; and two schools, Meridian Charter and Coeur d'Alene Charter Academy, are in the "advanced" range. The math scores show a similar pattern. The lowest math score is at the proficient level, and the scores from the two highest schools are in the advanced range. Additionally, the language scores are similar.

Table 15

Grade 10 Language	*N*	*Low*	*Middle*	*High*
Renaissance Charter School	8	222.5		
Idaho Leadership Academy	19	227.47	227.47	
Liberty Charter School	24	228	228	

Meridian Charter High School	45		234.8	234.8
Coeur d'Alene Charter Academy	34			236.53

The lowest language score is in the proficient range; and the two highest schools are in the advanced range. The ranking of 10th graders' scores is the same for all three subject areas: Renaissance, Idaho Leadership Academy, Liberty, Meridian, and Coeur d'Alene. The fact that the same schools are at the bottom of the scale is not a criticism because these schools are in the proficient range. What is critical is that the highest schools' scores are in the advanced range.

Research questions 4 and 5 ask whether ANSER and Hidden Springs students' score higher than the other students in the Boise District, and research question 6 asks which of these two charters' students scores higher. Table 3 contains the answers to these research questions. In grade 4 both Hidden Springs' and ANSER's students scored higher than the TPS students in the district. However in grade 8, there was no difference in the scores of the Hidden Springs' students and those of the TPS students in the district. Which charter in the Boise district had the higher scores? This question can be addressed at only the 4th grade because ANSER does not have 8th grade or 10th grade. In the fourth grade, ANSER's students outscored the students from Hidden Springs.

Conclusion

The evidence is clear: In most situations charter school students have obtained higher ISAT scores than traditional public school students. These results are statistically significant, and indicate that real differences do exist between the two different types of public education. However how strong are the differences and how meaningful and important are they? Statisticians determine the level of importance of differences with the "effect size" statistic. Although statistically significant differences may exist, as they do in this analysis, the importance of those differences is expressed by the effect size statistic. When effect sizes are small, statisticians refer to the differences as being statistically significant, but having little practical significance. The literature is unclear as to what important effect sizes should be in multivariate analysis (Green), however, effect sizes of the magnitudes present throughout this analysis are

certainly small. In univariate analysis, effect sizes of .2, .4, and .8 are considered small, medium, and large (Stevens) respectively. For the most part the effect sizes in this analysis are less than .1. In a multivariate sense these effect sizes are consistently weak. Consequently, the use of the effect size statistic indicates the differences in the schools might reach statistical significance, but might not have much practical meaning. That is, the differences are real; but when these differences are quantified, they are not substantial.

Educators nationwide are overcoming achievement gaps among disaggregated groups of students, and Idaho educators will continue to work to bring all children to proficient levels in the ISAT. However the challenge is greater for the traditional public schools because their populations, on a percentage basis and of course on an absolute basis, of handicapped students are greater. The ISAT data does not categorize the type of disabilities among special education students, and even though the special education population in charter schools is 7% (as compared to 11% in the TPS), that 7% is most likely made up of children with minor disabilities as compared to the children with very severe disabilities who are left in the TPS.

The charter schools are heavily underrepresented in the three categories of disabilities: limited English proficiency, special education, and free and reduced lunch. The closest of these under representations is special education. However, a special education categorization has a very broad spectrum, all the way from a student who has a speech impediment to a self-contained emotionally disturbed student to a student in a wheel chair on a respirator. These data do not provide that level of disaggregation. Prior to any conclusions being made regarding charter schools' efficacy with special education students, an audit of the types of special education disabilities among charter school students should be completed.

Additionally, there is no way to know with the available data if higher achievement among charter school students is the result of the instruction received in the charter school, or if higher achievement is the result of a multitude of other factors. There must at least be an awareness that present day charter school students may have had higher achievement when they were in the TPS, and that the charter school education has had no effect

on their higher achievement. The question still remains, what is the charter school effect? This question can be answered, but an experiment will have to be designed and carried out over the course of future testing.

Recommendations

Based on this analysis, several questions must be asked regarding charter schools. These questions focus on the significant question, are charter schools open to all students? Obviously, the law requires that they be, but in fact are they really? The data indicate that they are heavily underrepresented in the three categories of disabilities which are measured. Would a migrant student be welcomed at a charter school? Would a severely multiply handicapped student be able to enroll? Why do the charter schools have only 17% free and reduced lunch students, while the public schools have 33%? Are charter schools creating a segregated, elitist system at public expense? The answers to these questions are very important and will affect the direction and potential of charter schools in Idaho. Further research should be conducted to determine the kinds of disabilities identified among charter school students. Additionally, further research should examine the issues of limited English proficient and migrant student under representation in the charter schools.

Appendix A
Statistical Analysis

ANSER Charter School – Grade 4 (vs. Boise District excluding Hidden Springs)

Case Processing Summary

		Cases Valid N	Percent	Missing N	Percent	Total N	Percent
RSRIT	TPS	1697	89.7%	194	10.3%	1891	100.0%
	Charter	21	100.0%	0	.0%	21	100.0%
MSRIT	TPS	1697	89.7%	194	10.3%	1891	100.0%
	Charter	21	100.0%	0	.0%	21	100.0%
LS_RIT	TPS	1697	89.7%	194	10.3%	1891	100.0%
	Charter	21	100.0%	0	.0%	21	100.0%

Distribution Normality

	Traditional Public School		Charter School	
RIT	Skewness	Kurtosis	Skewness	Kurtosis
Reading	-.142	.047	-.740	-.563
Math	.048	.432	-1.161	1.394
Language	-.181	.104	.276	-.373

Descriptive Statistics

	Charter2	Mean	Std. Deviation	N
RSRIT	TPS	207.44	11.252	1697
	Charter	221.52	9.389	21
	Total	207.61	11.335	1718
MSRIT	TPS	213.29	11.394	1697
	Charter	219.57	8.925	21
	Total	213.37	11.386	1718
LS_RIT	TPS	209.08	9.811	1697
	Charter	217.48	8.370	21
	Total	209.19	9.836	1718

Box's Test of Equality of Covariance Matrices

Box's M	3.341
F	.526
df1	6
df2	6494.320
Sig.	.789

Multivariate Tests

Effect	Value	F	Hypothes	Error df	Sig.	Partial	Observed

				is df			Eta Squared	Power
Charter vs. TPS	Wilks' Lambda	.976	13.921	3.000	1714.000	.000	.024	1.000

a. Computed using alpha = .05

Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power
Corrected Model	RSRIT	4113.368	1	4113.368	32.605	.000	.019	1.000
	MSRIT	817.247	1	817.247	6.324	.012	.004	.710
	LS_RIT	1460.835	1	1460.835	15.224	.000	.009	.974

a. Computed using alpha = .05
b. R Squared = .019 (Adjusted R Squared = .018)
c. R Squared = .004 (Adjusted R Squared = .003)
d. R Squared = .009 (Adjusted R Squared = .008)

Hidden Springs Charter School – Grade 4 (vs. Boise District excluding ANSER)

Case Processing Summary

		Cases Valid N	Percent	Missing N	Percent	Total N	Percent
RSRIT	TPS	1697	89.7%	194	10.3%	1891	100.0%
	Charter	26	92.9%	2	7.1%	28	100.0%
MSRIT	TPS	1697	89.7%	194	10.3%	1891	100.0%
	Charter	26	92.9%	2	7.1%	28	100.0%
LS_RIT	TPS	1697	89.7%	194	10.3%	1891	100.0%
	Charter	26	92.9%	2	7.1%	28	100.0%

Distribution Normality

	Traditional Public School		Charter School	
RIT	Skewness	Kurtosis	Skewness	Kurtosis
Reading	-.142	.047	-.796	.723
Math	.048	.432	.169	-.724
Language	-.181	.104	-.385	1.204

Descriptive Statistics

		Mean	Std. Deviation	N
RSRIT	TPS	207.44	11.252	1697
	Charter	212.50	10.124	26
	Total	207.52	11.250	1723
MSRIT	TPS	213.29	11.394	1697
	Charter	225.46	12.984	26
	Total	213.48	11.511	1723

LS_RIT	TPS	209.08	9.811	1697
	Charter	213.69	9.490	26
	Total	209.15	9.820	1723

Box's Test of Equality of Covariance Matrices

Box's M	6.146
F	.979
df1	6
df2	10150.979
Sig.	.437

Multivariate Tests

Effect	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared	Observed Power
Wilks' Lambda	.977	13.248	3.000	1719.000	.000	.023	1.000

a. Computed using alpha = .05
b. Exact statistic
c. Design: Intercept+CHART01

Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power
Corrected Model	RSRIT	655.141	1	655.141	5.189	.023	.003	.624
	MSRIT	3790.791	1	3790.791	29.074	.000	.017	1.000
	LSRIT	543.754	1	543.754	5.654	.018	.003	.661

a. Computed using alpha = .05
b. R Squared = .003 (Adjusted R Squared = .002)
c. R Squared = .017 (Adjusted R Squared = .016)
d. R Squared = .003 (Adjusted R Squared = .003)

Hidden Springs Charter School – Grade 8 (vs. Boise District excluding ANSER)

Case Processing Summary

		Cases Valid N	Percent	Missing N	Percent	Total N	Percent
RSRIT	TPS	1836	96.2%	73	3.8%	1909	100.0%
	Charter	18	78.3%	5	21.7%	23	100.0%
MSRIT	TPS	1836	96.2%	73	3.8%	1909	100.0%
	Charter	18	78.3%	5	21.7%	23	100.0%
LS_RIT	TPS	1836	96.2%	73	3.8%	1909	100.0%
	Charter	18	78.3%	5	21.7%	23	100.0%

Distribution Normality

	Traditional Public School		Charter School	
RIT	Skewness	Kurtosis	Skewness	Kurtosis
Reading	-.267	-.079	.000	-.845
Math	-.012	.263	-.460	-1.307
Language	-.173	.627	.145	-1.097

Descriptive Statistics

		Mean	Std. Deviation	N
RSRIT	TPS	226.15	10.836	1836
	Charter	231.50	13.461	18
	Total	226.20	10.873	1854
MSRIT	TPS	236.64	14.254	1836
	Charter	239.83	17.840	18
	Total	236.67	14.290	1854
LS_RIT	TPS	224.65	9.541	1836
	Charter	228.44	11.628	18
	Total	224.69	9.567	1854

Box's Test of Equality of Covariance Matrices

Box's M	3.613
F	.563
df1	6
df2	4691.001
Sig.	.760

Multivariate Tests

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared	Observed Power
	Wilks' Lambda	.997	1.882	3.000	1850.000	.131	.003	.490

a. Computed using alpha = .05

Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power
Corrected Model	RSRIT	510.245	1	510.245	4.324	.038	.002	.547
	MSRIT	181.463	1	181.463	.889	.346	.000	.156
	LSRIT	256.379	1	256.379	2.804	.094	.002	.387

a. Computed using alpha = .05
b. R Squared = .002 (Adjusted R Squared = .002)
c. R Squared = .000 (Adjusted R Squared = .000)
d. R Squared = .002 (Adjusted R Squared = .001)

Hidden Springs Charter School vs. ANSER Charter School – Grade 4

Case Processing Summary

	School Code	Cases Valid N	Cases Valid Percent	Missing N	Missing Percent	Total N	Total Percent
RSRIT	H.S.	26	92.9%	2	7.1%	28	100.0%
	ANSER	21	100.0%	0	.0%	21	100.0%
MSRIT	H.S.	26	92.9%	2	7.1%	28	100.0%
	ANSER	21	100.0%	0	.0%	21	100.0%
LSRIT	H.S.	26	92.9%	2	7.1%	28	100.0%
	ANSER	21	100.0%	0	.0%	21	100.0%

Distribution Normality

	Hidden Springs		ANSER	
RIT	Skewness	Kurtosis	Skewness	Kurtosis
Reading	-.796	.723	-.740	-.563
Math	.169	-.724	-1.16	1.39
Language	-.385	1.204	.276	-.373

Descriptive Statistics

	School Code	Mean	Std. Deviation	N
RSRIT	H.S.	212.50	10.124	26
	ANSER	221.52	9.389	21
	Total	216.53	10.705	47
MSRIT	H.S.	225.46	12.984	26
	ANSER	219.57	8.925	21
	Total	222.83	11.620	47
LSRIT	H.S.	213.69	9.490	26
	ANSER	217.48	8.370	21
	Total	215.38	9.112	47

Box's Test of Equality of Covariance Matrices

Box's M	6.284
F	.970
df1	6
df2	12925.71
	1
Sig.	.444

Multivariate Tests

Effect	Value	F	Hypothes	Error df	Sig.	Partial	Observed

			is df			Eta Squared	Power
	Wilks' Lambda	.442	18.072	3.000	43.000	.000	.558	1.000

Computed using alpha = .05

Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power
Corrected Model	RSRIT	945.964	1	945.964	9.841	.003	.179	.866
	MSRIT	403.034	1	403.034	3.123	.084	.065	.409
	LSRIT	166.330	1	166.330	2.049	.159	.044	.288

a. Computed using alpha = .05
b. R Squared = .179 (Adjusted R Squared = .161)
c. R Squared = .065 (Adjusted R Squared = .044)
d. R Squared = .044 (Adjusted R Squared = .022)

(In multivariate terms, ANSER is outperforming Hidden Springs in Grade 4. Looking at the data in a univariate sense, the higher performance is the result of the difference in the Reading RIT scores.)

Blackfoot School District – Grade 4

Case Processing Summary

		Cases Valid N	Percent	Missing N	Percent	Total N	Percent
RSRIT	TPS	284	96.6%	10	3.4%	294	100.0%
	Charter	8	72.7%	3	27.3%	11	100.0%
MSRIT	TPS	284	96.6%	10	3.4%	294	100.0%
	Charter	8	72.7%	3	27.3%	11	100.0%
LSRIT	TPS	284	96.6%	10	3.4%	294	100.0%
	Charter	8	72.7%	3	27.3%	11	100.0%

Distribution Normality

	Traditional Public School		Charter School	
RIT	Skewness	Kurtosis	Skewness	Kurtosis
Reading	.286	-.325	.266	-1.576
Math	.430	.372	.377	-.481
Language	.111	.072	-.387	-.888

Descriptive Statistics

	Charter	Mean	Std. Deviation	N
RSRIT	0	201.02	10.933	284
	1	189.88	10.521	8

	Total	200.72	11.056	292
MSRIT	0	205.89	10.228	284
	1	205.38	15.399	8
	Total	205.87	10.365	292
LSRIT	0	202.55	9.991	284
	1	195.63	8.484	8
	Total	202.36	10.004	292

Box's Test of Equality of Covariance Matrices

Box's M	15.380
F	2.147
df1	6
df2	797.230
Sig.	.046

Multivariate Tests

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared	Observed Power
Charter vs. TPS	Wilks' Lambda	.938	6.311	3.000	288.000	.000	.062	.965

a. Computed using alpha = .05

Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power
	RSRIT	967.270	1	967.270	8.107	.005	.027	.810
	MSRIT	2.042	1	2.042	.019	.891	.000	.052
	LSRIT	373.438	1	373.438	3.767	.053	.013	.490

a. Computed using alpha = .05
b. R Squared = .027 (Adjusted R Squared = .024)
c. R Squared = .000 (Adjusted R Squared = -.003)
d. R Squared = .013 (Adjusted R Squared = .009)

Coeur d'Alene School District #271 – Grade 8

Case Processing Summary

		Cases					
		Valid		Missing		Total	
	Charter2	N	Percent	N	Percent	N	Percent
RSRIT	0	730	96.6%	26	3.4%	756	100.0%
	1	64	98.5%	1	1.5%	65	100.0%
MSRIT	0	730	96.6%	26	3.4%	756	100.0%
	1	64	98.5%	1	1.5%	65	100.0%
LSRIT	0	730	96.6%	26	3.4%	756	100.0%
	1	64	98.5%	1	1.5%	65	100.0%

Distribution Normality

	Traditional Public School		Charter School	
RIT	Skewness	Kurtosis	Skewness	Kurtosis
Reading	-287	.289	-.407	.422
Math	.178	.106	-.073	1.154
Language	-.070	.071	.206	.082

Descriptive Statistics

	Charter2	Mean	Std. Deviation	N
RSRIT	0	226.45	9.646	730
	1	230.27	8.575	64
	Total	226.75	9.616	794
MSRIT	0	238.63	12.879	730
	1	241.45	10.150	64
	Total	238.85	12.699	794
LSRIT	0	224.96	8.431	730
	1	232.37	8.048	64
	Total	225.56	8.635	794

Box's Test of Equality of Covariance Matrices

Box's M	7.127
F	1.167
df1	6
df2	66320.488
Sig.	.321

Multivariate Tests

Effect	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared	Observed Power
Wilks' Lambda	.916	24.174	3.000	790.000	.000	.084	1.000

Computed using alpha = .05

Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power
Corrected Model	RSRIT	858.825	1	858.825	9.386	.002	.012	.864
	MSRIT	470.288	1	470.288	2.923	.088	.004	.401
	LSRIT	3231.402	1	3231.402	45.781	.000	.055	1.000

a. Computed using alpha = .05
b. R Squared = .012 (Adjusted R Squared = .010)
c. R Squared = .004 (Adjusted R Squared = .002)
d. R Squared = .055 (Adjusted R Squared = .053)

Coeur d'Alene School District #271 – Grade 10

Case Processing Summary

	Charter2	Cases Valid N	Percent	Missing N	Percent	Total N	Percent
RSRIT	0	646	92.6%	52	7.4%	698	100.0%
	1	34	91.9%	3	8.1%	37	100.0%
MSRIT	0	646	92.6%	52	7.4%	698	100.0%
	1	34	91.9%	3	8.1%	37	100.0%
LSRIT	0	646	92.6%	52	7.4%	698	100.0%
	1	34	91.9%	3	8.1%	37	100.0%

Distribution Normality

	Traditional Public School		Charter School	
RIT	Skewness	Kurtosis	Skewness	Kurtosis
Reading	.173	.208	.802	.756
Math	.246	-.177	.477	-.930
Language	.463	1.060	.741	-.045

Descriptive Statistics

	Charter2	Mean	Std. Deviation	N
RSRIT	0	230.00	7.964	646
	1	238.29	7.713	34
	Total	230.42	8.150	680
MSRIT	0	249.86	11.646	646
	1	260.26	10.587	34
	Total	250.38	11.809	680
LSRIT	0	228.38	8.171	646
	1	236.53	7.370	34
	Total	228.79	8.319	680

Box's Test of Equality of Covariance Matrices

Box's M	7.668
F	1.235
df1	6
df2	17866.462
Sig.	.284

Multivariate Tests

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared	Observed Power
	Wilks' Lambda	.947	12.646	3.000	676.000	.000	.053	1.000

Computed using alpha = .05

Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power
Corrected Model	RSRIT	2220.336	1	2220.336	35.111	.000	.049	1.000
	MSRIT	3499.394	1	3499.394	26.020	.000	.037	.999
	LSRIT	2143.899	1	2143.899	32.409	.000	.046	1.000

a. Computed using alpha = .05
b. R Squared = .049 (Adjusted R Squared = .048)
c. R Squared = .037 (Adjusted R Squared = .036)
d. R Squared = .046 (Adjusted R Squared = .044)

Butte County Joint School District #111 – Grade 4

Case Processing Summary

		Cases Valid N	Percent	Missing N	Percent	Total N	Percent
RSRIT	TPS	39	100.0%	0	.0%	39	100.0%
	Charter	118	78.7%	32	21.3%	150	100.0%
MSRIT	TPS	39	100.0%	0	.0%	39	100.0%
	Charter	118	78.7%	32	21.3%	150	100.0%
LS_RIT	TPS	39	100.0%	0	.0%	39	100.0%
	Charter	118	78.7%	32	21.3%	150	100.0%

Distribution Normality

	Traditional Public School		Charter School	
RIT	Skewness	Kurtosis	Skewness	Kurtosis
Reading	-.709	.259	.295	.667
Math	.110	-.073	.679	.564
Language	-.187	-.407	-.126	.113

Descriptive Statistics

	Charter2	Mean	Std. Deviation	N
RSRIT	TPS	207.28	11.358	39
	Charter	207.58	12.389	118
	Total	207.51	12.106	157
MSRIT	TPS	212.44	11.688	39
	Charter	209.83	11.924	118
	Total	210.48	11.882	157
LS_RIT	TPS	207.46	11.052	39
	Charter	209.49	10.938	118
	Total	208.99	10.966	157

Box's Test of Equality of Covariance Matrices

Box's M	4.767
F	.770
df1	6
df2	30858.503
Sig.	.593

Multivariate Tests

Effect	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared	Observed Power
Wilks' Lambda	.927	4.017	3.000	153.000	.009	.073	.832

Computed using alpha = .05

Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power
Corrected Model	RSRIT	2.686	1	2.686	.018	.893	.000	.052
	MSRIT	198.972	1	198.972	1.413	.236	.009	.219
	LS_RIT	120.791	1	120.791	1.004	.318	.006	.169

a. Computed using alpha = .05
b. R Squared = .000 (Adjusted R Squared = -.006)
c. R Squared = .009 (Adjusted R Squared = .003)
d. R Squared = .006 (Adjusted R Squared = .000)

Snake River School District #052 – Grade 10 (Idaho Leadership Academy)

Case Processing Summary

	Charter2	Cases Valid N	Cases Valid Percent	Missing N	Missing Percent	Total N	Total Percent
RSRIT	0	149	98.7%	2	1.3%	151	100.0%
	1	19	54.3%	16	45.7%	35	100.0%
MSRIT	0	149	98.7%	2	1.3%	151	100.0%
	1	19	54.3%	16	45.7%	35	100.0%
LSRIT	0	149	98.7%	2	1.3%	151	100.0%
	1	19	54.3%	16	45.7%	35	100.0%

Distribution Normality

	Traditional Public School		Charter School	
RIT	Skewness	Kurtosis	Skewness	Kurtosis
Reading	.284	-.110	-.156	-1.38
Math	-.059	-.521	.197	-.337
Language	.023	.081	-.149	-.406

Descriptive Statistics

	Charter2	Mean	Std. Deviation	N
RSRIT	0	229.46	7.870	149
	1	229.79	9.467	19
	Total	229.50	8.035	168
MSRIT	0	249.63	10.276	149
	1	245.37	10.505	19
	Total	249.15	10.359	168
LSRIT	0	227.54	8.888	149
	1	227.47	10.308	19
	Total	227.54	9.026	168

Box's Test of Equality of Covariance Matrices

Box's M	5.021
F	.785
df1	6
df2	5550.879
Sig.	.582

Multivariate Tests

	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared	Observed Power
Wilks' lambda	.957	2.461	3.000	164.000	.064	.043	.604

Computed using alpha = .05

Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power
Corrected Model	RSRIT	1.795	1	1.795	.028	.868	.000	.053
	MSRIT	306.161	1	306.161	2.885	.091	.017	.393
	LSRIT	8.243E-02	1	8.243E-02	.001	.975	.000	.050

a. Computed using alpha = .05
b. R Squared = .000 (Adjusted R Squared = -.006)
c. R Squared = .017 (Adjusted R Squared = .011)

Mountain Home School District #193 – Grade 10

NO DATA FOR IDAHO VIRTUAL HIGH SCHOOL

Nampa School District #131 – Grade 4 (Liberty Charter)

Case Processing Summary

Cases			
Valid		Missing	Total

		N	Percent	N	Percent	N	Percent
RSRIT	TPS	889	96.6%	31	3.4%	920	100.0%
	Charter	32	97.0%	1	3.0%	33	100.0%
MSRIT	TPS	889	96.6%	31	3.4%	920	100.0%
	Charter	32	97.0%	1	3.0%	33	100.0%
LS_RIT	TPS	889	96.6%	31	3.4%	920	100.0%
	Charter	32	97.0%	1	3.0%	33	100.0%

Distribution Normality

	Traditional Public School		Charter School	
RIT	Skewness	Kurtosis	Skewness	Kurtosis
Reading	.113	-.184	-.101	.581
Math	.012	.125	-.295	-.836
Language	-.003	.268	-.491	1.197

Descriptive Statistics

		Mean	Std. Deviation	N
RSRIT	TPS	203.21	10.858	889
	Charter	210.72	10.309	32
	Total	203.47	10.921	921
MSRIT	TPS	209.28	11.116	889
	Charter	225.69	13.150	32
	Total	209.85	11.581	921
LS_RIT	TPS	205.07	10.197	889
	Charter	210.97	10.190	32
	Total	205.28	10.248	921

Box's Test of Equality of Covariance Matrices

Box's M	6.190
F	.995
df1	6
df2	15676.213
Sig.	.426

Multivariate Tests

Effect	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared	Observed Power
Wilks' Lambda	.912	29.320	3.000	917.000	.000	.088	1.000

Computed using alpha = .05

Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power
Corrected Model	RSRIT	1743.442	1	1743.442	14.837	.000	.016	.970

	MSRIT	8318.611	1	8318.611	66.430	.000	.067	1.000
	LS_RIT	1074.446	1	1074.446	10.334	.001	.011	.895

a. Computed using alpha = .05
b. R Squared = .016 (Adjusted R Squared = .015)
c. R Squared = .067 (Adjusted R Squared = .066)
d. R Squared = .011 (Adjusted R Squared = .010)

Nampa School District #131 – Grade 8

Case Processing Summary

		Cases					
		Valid		Missing		Total	
		N	Percent	N	Percent	N	Percent
RSRIT	TPS	820	95.2%	41	4.8%	861	100.0%
	Charter	31	96.9%	1	3.1%	32	100.0%
MSRIT	TPS	820	95.2%	41	4.8%	861	100.0%
	Charter	31	96.9%	1	3.1%	32	100.0%
LS_RIT	TPS	820	95.2%	41	4.8%	861	100.0%
	Charter	31	96.9%	1	3.1%	32	100.0%

Distribution Normality

	Traditional Public School		Charter School	
RIT	Skewness	Kurtosis	Skewness	Kurtosis
Reading	-.013	-.315	-.259	-.833
Math	.100	-.145	.026	-1.068
Language	-.030	-.123	-.077	-.771

Descriptive Statistics

		Mean	Std. Deviation	N
RSRIT	TPS	221.62	10.700	820
	Charter	229.42	12.412	31
	Total	221.90	10.858	851
MSRIT	TPS	229.47	13.051	820
	Charter	243.90	15.030	31
	Total	229.99	13.394	851
LS_RIT	TPS	219.79	9.028	820
	Charter	229.68	12.438	31
	Total	220.15	9.350	851

Box's Test of Equality of Covariance Matrices

Box's M	10.161
F	1.632
df1	6
df2	14688.760
Sig.	.134

Multivariate Tests

Effect	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared	Observed Power
Wilks' Lambda	.012	24093.622	3.000	847.000	.000	.988	1.000

Computed using alpha = .05

Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power
Corrected Model	RSRIT	1818.399	1	1818.399	15.691	.000	.018	.977
	MSRIT	6225.137	1	6225.137	36.133	.000	.041	1.000
	LS_RIT	2921.492	1	2921.492	34.744	.000	.039	1.000

a. Computed using alpha = .05
b. R Squared = .018 (Adjusted R Squared = .017)
c. R Squared = .041 (Adjusted R Squared = .040)
d. R Squared = .039 (Adjusted R Squared = .038)

Nampa School District #131 – Grade 10

Case Processing Summary

		Cases Valid N	Percent	Missing N	Percent	Total N	Percent
RSRIT	TPS	596	85.0%	105	15.0%	701	100.0%
	Charter	24	100.0%	0	.0%	24	100.0%
MSRIT	TPS	596	85.0%	105	15.0%	701	100.0%
	Charter	24	100.0%	0	.0%	24	100.0%
LS_RIT	TPS	596	85.0%	105	15.0%	701	100.0%
	Charter	24	100.0%	0	.0%	24	100.0%

Distribution Normality

	Traditional Public School		Charter School	
RIT	Skewness	Kurtosis	Skewness	Kurtosis
Reading	.166	.043	-1.07	.471
Math	.513	.144	-.253	-.059
Language	.208	.196	.032	-.587

Descriptive Statistics

		Mean	Std. Deviation	N
RSRIT	TPS	227.21	8.273	596
	Charter	231.46	7.774	24
	Total	227.37	8.289	620
MSRIT	TPS	245.16	11.353	596
	Charter	252.00	12.438	24
	Total	245.43	11.463	620
LS_RIT	TPS	225.00	7.731	596

Charter	228.00	7.791	24
Total	225.12	7.748	620

Box's Test of Equality of Covariance Matrices

Box's M	12.935
F	2.053
df1	6
df2	8639.234
Sig.	.055

Multivariate Tests

Effect	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared	Observed Power
Wilks' Lambda	.985	3.078	3.000	616.000	.027	.015	.721

Computed using alpha = .05

Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power
Corrected Model	RSRIT	416.774	1	416.774	6.116	.014	.010	.695
	MSRIT	1079.050	1	1079.050	8.309	.004	.013	.821
	LS_RIT	207.407	1	207.407	3.468	.063	.006	.460

a. Computed using alpha = .05
b. R Squared = .010 (Adjusted R Squared = .008)
c. R Squared = .013 (Adjusted R Squared = .012)
d. R Squared = .006 (Adjusted R Squared = .004)

Meridian School District #002 – Grade 10

Case Processing Summary

		Cases Valid N	Percent	Missing N	Percent	Total N	Percent
RSRIT	TPS	1407	78.5%	385	21.5%	1792	100.0%
	Charter	45	97.8%	1	2.2%	46	100.0%
MSRIT	TPS	1407	78.5%	385	21.5%	1792	100.0%
	Charter	45	97.8%	1	2.2%	46	100.0%
LS_RIT	TPS	1407	78.5%	385	21.5%	1792	100.0%
	Charter	45	97.8%	1	2.2%	46	100.0%

Distribution Normality

	Traditional Public School		Charter School	
RIT	Skewness	Kurtosis	Skewness	Kurtosis
Reading	-.001	-.403	.234	-.555
Math	.153	-.452	.404	-.298
Language	.215	-.248	.701	1.19

Descriptive Statistics

	Charter2	Mean	Std. Deviation	N
RSRIT	TPS	232.29	7.154	1407
	Charter	236.67	8.068	45
	Total	232.43	7.221	1452
MSRIT	TPS	253.61	10.375	1407
	Charter	259.29	10.623	45
	Total	253.79	10.425	1452
LS_RIT	TPS	230.25	7.153	1407
	Charter	234.80	8.409	45
	Total	230.39	7.235	1452

Box's Test of Equality of Covariance Matrices

Box's M	6.174
F	1.003
df1	6
df2	31548.731
Sig.	.421

Multivariate Tests

Effect	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared	Observed Power
Wilks' Lambda	.986	6.728	3.000	1448.000	.000	.014	.976

Computed using alpha = .05

Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power
Corrected Model	RSRIT	834.736	1	834.736	16.177	.000	.011	.980
	MSRIT	1406.359	1	1406.359	13.047	.000	.009	.950
	LSRIT	904.080	1	904.080	17.468	.000	.012	.987

a. Computed using alpha = .05
b. R Squared = .011 (Adjusted R Squared = .010)
c. R Squared = .009 (Adjusted R Squared = .008)
d. R Squared = .012 (Adjusted R Squared = .011)

Moscow School District #281 – Grade 4 Moscow Charter School vs. District

Case Processing Summary

		Cases Valid N	Valid Percent	Missing N	Missing Percent	Total N	Total Percent
RSRIT	TPS	154	94.5%	9	5.5%	163	100.0%

	Charter	20	100.0%	0	.0%	20	100.0%
MSRIT	TPS	154	94.5%	9	5.5%	163	100.0%
	Charter	20	100.0%	0	.0%	20	100.0%
LSRIT	TPS	154	94.5%	9	5.5%	163	100.0%
	Charter	20	100.0%	0	.0%	20	100.0%

Distribution Normality

	Traditional Public School		Charter School	
RIT	Skewness	Kurtosis	Skewness	Kurtosis
Reading	-.037	-.182	.633	-.237
Math	.101	-.359	.859	.418
Language	-.265	.050	.464	-.736

Descriptive Statistics

	Charter	Mean	Std. Deviation	N
RSRIT	TPS	209.73	11.284	154
	Charter	213.55	11.888	20
	Total	210.17	11.385	174
MSRIT	TPS	216.67	10.463	154
	Charter	221.60	10.811	20
	Total	217.24	10.589	174
LSRIT	TPS	209.77	9.765	154
	Charter	212.90	7.966	20
	Total	210.13	9.608	174

Box's Test of Equality of Covariance Matrices

Box's M	5.639
F	.885
df1	6
df2	6197.417
Sig.	.505

Multivariate Tests

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
	Wilks' Lambda	.978	1.293	3.000	170.000	.278	.022

Computed using alpha = .05

Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power
Corrected Model	RSRIT	258.671	1	258.671	2.007	.158	.012	.291
	MSRIT	430.429	1	430.429	3.903	.050	.022	.502
	LSRIT	173.834	1	173.834	1.893	.171	.011	.277
	LSRIT	15795.38	172	91.834				

a. Computed using alpha = .05
b. R Squared = .011 (Adjusted R Squared = .010)
c. R Squared = .009 (Adjusted R Squared = .008)
d. R Squared = .012 (Adjusted R Squared = .011)

Moscow School District #281 – Grade 4 Renaissance Charter School vs. District

Case Processing Summary

		Cases Valid		Missing		Total	
		N	Percent	N	Percent	N	Percent
RSRIT	TPS	154	94.5%	9	5.5%	163	100.0%
	Charter	6	100.0%	0	.0%	6	100.0%
MSRIT	TPS	154	94.5%	9	5.5%	163	100.0%
	Charter	6	100.0%	0	.0%	6	100.0%
LSRIT	TPS	154	94.5%	9	5.5%	163	100.0%
	Charter	6	100.0%	0	.0%	6	100.0%

Distribution Normality

	Traditional Public School		Charter School	
RIT	Skewness	Kurtosis	Skewness	Kurtosis
Reading	-.037	-.182	-.148	-2.43
Math	.101	-.359	-.199	-1.87
Language	-.265	.050	.442	-1.56

Descriptive Statistics

		Mean	Std. Deviation	N
RSRIT	TPS	209.73	11.284	154
	Charter	215.67	12.612	6
	Total	209.95	11.349	160
MSRIT	TPS	216.67	10.463	154
	Charter	214.83	13.227	6
	Total	216.60	10.534	160
LSRIT	TPS	209.77	9.765	154
	Charter	213.17	14.386	6
	Total	209.89	9.934	160

Box's Test of Equality of Covariance Matrices

Box's M	11.031
F	1.413
df1	6
df2	407.550
Sig.	.208

Multivariate Tests

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared	Observed Power
	Wilks'	.968	1.722	3.000	156.000	.165	.032	.444

Lambda
Computed using alpha = .05

Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power
Corrected Model	RSRIT	203.721	1	203.721	1.587	.210	.010	.240
	MSRIT	19.456	1	19.456	.174	.677	.001	.070
	LSRIT	66.776	1	66.776	.675	.412	.004	.129

a. Computed using alpha = .05
b. R Squared = .010 (Adjusted R Squared = .004)
c. R Squared = .001 (Adjusted R Squared = -.005)
d. R Squared = .004 (Adjusted R Squared = -.002)

Moscow School District #281 – Grade 8 Renaissance Charter School vs. District

Case Processing Summary

		Cases Valid N	Percent	Missing N	Percent	Total N	Percent
RSRIT	TPS	177	95.2%	9	4.8%	186	100.0%
	Charter	8	88.9%	1	11.1%	9	100.0%
MSRIT	TPS	177	95.2%	9	4.8%	186	100.0%
	Charter	8	88.9%	1	11.1%	9	100.0%
LSRIT	TPS	177	95.2%	9	4.8%	186	100.0%
	Charter	8	88.9%	1	11.1%	9	100.0%

Distribution Normality

	Traditional Public School		Charter School	
RIT	Skewness	Kurtosis	Skewness	Kurtosis
Reading	-.058	.004	.175	-.549
Math	-.057	-.287	.288	-1.01
Language	-.149	-.502	-.051	-.458

Descriptive Statistics

		Mean	Std. Deviation	N
RSRIT	TPS	228.90	10.116	177
	Charter	221.38	7.836	8
	Total	228.58	10.128	185
MSRIT	TPS	240.62	14.344	177
	Charter	227.13	10.842	8
	Total	240.04	14.452	185
LSRIT	TPS	226.91	10.279	177
	Charter	218.88	8.459	8
	Total	226.56	10.319	185

Box's Test of Equality of Covariance Matrices

Box's M	10.952
F	1.529
df1	6
df2	800.523
Sig.	.166

Multivariate Tests

Effect	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared	Observed Power
Wilks' Lambda	.963	2.303	3.000	181.000	.079	.037	.573

Computed using alpha = .05

Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power
Corrected Model	RSRIT	433.871	1	433.871	4.306	.039	.023	.542
	MSRIT	1394.222	1	1394.222	6.889	.009	.036	.742
	LSRIT	494.106	1	494.106	4.735	.031	.025	.581

a. Computed using alpha = .05
b. R Squared = .023 (Adjusted R Squared = .018)
c. R Squared = .036 (Adjusted R Squared = .031)
d. R Squared = .025 (Adjusted R Squared = .020)

Moscow School District #281 – Grade 10 Renaissance Charter School vs. District

---

Case Processing Summary

		Cases Valid N	Percent	Missing N	Percent	Total N	Percent
RSRIT	TPS	193	98.0%	4	2.0%	197	100.0%
	Charter	8	80.0%	2	20.0%	10	100.0%
MSRIT	TPS	193	98.0%	4	2.0%	197	100.0%
	Charter	8	80.0%	2	20.0%	10	100.0%
LSRIT	TPS	193	98.0%	4	2.0%	197	100.0%
	Charter	8	80.0%	2	20.0%	10	100.0%

Distribution Normality

	Traditional Public School		Charter School	
RIT	Skewness	Kurtosis	Skewness	Kurtosis
Reading	-.150	-.247	-.064	-.952
Math	-.022	-.241	.620	-1.46
Language	-.002	-.042	.286	-1.08

Descriptive Statistics

	Mean	Std.	N

			Deviation	
RSRIT	TPS	234.89	9.418	193
	Charter	227.00	10.085	8
	Total	234.58	9.544	201
MSRIT	TPS	255.65	12.242	193
	Charter	241.63	10.405	8
	Total	255.09	12.459	201
LSRIT	TPS	230.18	8.857	193
	Charter	222.50	9.725	8
	Total	229.88	8.994	201

Box's Test of Equality of Covariance Matrices

Box's M	10.175
F	1.420
df1	6
df2	799.679
Sig.	.204

Multivariate Tests

Effect	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared	Observed Power
Wilks' Lambda	.951	3.373	3.000	197.000	.019	.049	.757

Computed using alpha = .05

Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power
Corrected Model	RSRIT	478.340	1	478.340	5.366	.022	.026	.635
	MSRIT	1510.472	1	1510.472	10.178	.002	.049	.888
	LSRIT	453.238	1	453.238	5.736	.018	.028	.664

a. Computed using alpha = .05
b. R Squared = .026 (Adjusted R Squared = .021)
c. R Squared = .049 (Adjusted R Squared = .044)
d. R Squared = .028 (Adjusted R Squared = .023)

Moscow School District #281 – Renaissance Charter vs. Moscow Charter – Grade 4

Case Processing Summary

	School Code	Cases Valid N	Percent	Missing N	Percent	Total N	Percent
RSRIT	Ren	6	100.0%	0	.0%	6	100.0%
	MCS	20	100.0%	0	.0%	20	100.0%
MSRIT	Ren	6	100.0%	0	.0%	6	100.0%
	MCS	20	100.0%	0	.0%	20	100.0%

LSRIT	Ren	6	100.0%	0	.0%	6	100.0%
	MCS	20	100.0%	0	.0%	20	100.0%

Distribution Normality

	Renaissance		Moscow Charter	
RIT	Skewness	Kurtosis	Skewness	Kurtosis
Reading	-.148	-2.43	.633	-.237
Math	-.199	-1.866	.859	.418
Language	.442	-1.561	.464	-.736

Descriptive Statistics

	School Code	Mean	Std. Deviation	N
RSRIT	Ren	215.67	12.612	6
	MCS	213.55	11.888	20
	Total	214.04	11.834	26
MSRIT	Ren	214.83	13.227	6
	MCS	221.60	10.811	20
	Total	220.04	11.501	26
LSRIT	Ren	213.17	14.386	6
	MCS	212.90	7.966	20
	Total	212.96	9.468	26

Box's Test of Equality of Covariance Matrices

Box's M	10.921
F	1.382
df1	6
df2	495.142
Sig.	.220

Multivariate Tests

Effect	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared	Observed Power
Wilks' Lambda	.737	2.623	3.000	22.000	.076	.263	.562

Computed using alpha = .05

Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power
Corrected Model	RSRIT	20.678	1	20.678	.143	.709	.006	.065
	MSRIT	211.328	1	211.328	1.638	.213	.064	.233
	LSRIT	.328	1	.328	.004	.953	.000	.050

a. Computed using alpha = .05
b. R Squared = .006 (Adjusted R Squared = -.036)
c. R Squared = .064 (Adjusted R Squared = .025)
d. R Squared = .000 (Adjusted R Squared = -.042)

Pocatello School District #25 – Grade 4

Case Processing Summary

		Cases					
		Valid		Missing		Total	
		N	Percent	N	Percent	N	Percent
RSRIT	TPS	807	97.3%	22	2.7%	829	100.0%
	Charter	19	95.0%	1	5.0%	20	100.0%
MSRIT	TPS	807	97.3%	22	2.7%	829	100.0%
	Charter	19	95.0%	1	5.0%	20	100.0%
LSRIT	TPS	807	97.3%	22	2.7%	829	100.0%
	Charter	19	95.0%	1	5.0%	20	100.0%

Distribution Normality

	Traditional Public School		Charter School	
RIT	Skewness	Kurtosis	Skewness	Kurtosis
Reading	-.049	-.270	.125	-.307
Math	.085	.187	.905	.339
Language	-.024	-.190	1.31	1.76

Descriptive Statistics

	Charter2	Mean	Std. Deviation	N
RSRIT	TPS	206.79	11.881	807
	Charter	208.89	11.372	19
	Total	206.84	11.867	826
MSRIT	TPS	209.81	11.069	807
	Charter	217.53	10.410	19
	Total	209.99	11.109	826
LSRIT	TPS	207.90	10.553	807
	Charter	211.11	8.672	19
	Total	207.97	10.520	826

Box's Test of Equality of Covariance Matrices

Box's M	6.514
F	1.019
df1	6
df2	5268.870
Sig.	.411

Multivariate Tests

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared	Observed Power
	Wilks' Lambda	.983	4.757	3.000	822.000	.003	.017	.901

Computed using alpha = .05

Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power
Corrected Model	RSRIT	82.284	1	82.284	.584	.445	.001	.119
	MSRIT	1105.505	1	1105.505	9.045	.003	.011	.852
	LSRIT	190.607	1	190.607	1.724	.190	.002	.259

Computed using alpha = .05

Pocatello School District #25 – Grade 8

Case Processing Summary

		Cases Valid N	Valid Percent	Missing N	Missing Percent	Total N	Total Percent
RSRIT	TPS	894	96.9%	29	3.1%	923	100.0%
	Charter	15	100.0%	0	.0%	15	100.0%
MSRIT	TPS	894	96.9%	29	3.1%	923	100.0%
	Charter	15	100.0%	0	.0%	15	100.0%
LSRIT	TPS	894	96.9%	29	3.1%	923	100.0%
	Charter	15	100.0%	0	.0%	15	100.0%

Distribution Normality

	Traditional Public School		Charter School	
RIT	Skewness	Kurtosis	Skewness	Kurtosis
Reading	-.090	-.222	-.183	1.10
Math	-.007	-.519	1.017	1.21
Language	-.158	-.087	-.891	1.15

Descriptive Statistics

	Charter2	Mean	Std. Deviation	N
RSRIT	TPS	222.49	10.807	894
	Charter	223.93	8.506	15
	Total	222.51	10.771	909
MSRIT	TPS	231.47	13.811	894
	Charter	224.80	12.434	15
	Total	231.36	13.809	909
LSRIT	TPS	222.37	9.472	894
	Charter	221.67	7.374	15
	Total	222.36	9.439	909

Box's Test of Equality of Covariance Matrices

Box's M	6.379
F	.979
df1	6
df2	3183.756
Sig.	.438

Multivariate Tests

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared	Observed Power
	Wilks' Lambda	.985	4.600	3.000	905.000	.003	.015	.890

Computed using alpha = .05

Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power
Corrected Model	RSRIT	30.878	1	30.878	.266	.606	.000	.081
	MSRIT	655.842	1	655.842	3.448	.064	.004	.458
	LSRIT	7.326	1	7.326	.082	.774	.000	.059

a. Computed using alpha = .05
b. R Squared = .000 (Adjusted R Squared = -.001)
c. R Squared = .004 (Adjusted R Squared = .003)

Lake Pend Oreille School District #084 – Grade 8

Case Processing Summary

	Charter2	Cases Valid N	Cases Valid Percent	Missing N	Missing Percent	Total N	Total Percent
RSRIT	0	280	89.7%	32	10.3%	312	100.0%
	1	6	31.6%	13	68.4%	19	100.0%
MSRIT	0	280	89.7%	32	10.3%	312	100.0%
	1	6	31.6%	13	68.4%	19	100.0%
LSRIT	0	280	89.7%	32	10.3%	312	100.0%
	1	6	31.6%	13	68.4%	19	100.0%

Distribution Normality

	Traditional Public School		Charter School	
RIT	Skewness	Kurtosis	Skewness	Kurtosis
Reading	.108	.351	-.171	-.730
Math	-.035	-.042	-.335	-1.874
Language	-.077	-.037	-.601	-.021

Descriptive Statistics

		Mean	Std. Deviation	N
RSRIT	TPS	224.76	10.661	280
	Charter	218.17	7.705	6
	Total	224.63	10.639	286
MSRIT	TPS	236.24	13.559	280

	Charter	227.67	5.428	6
	Total	236.06	13.491	286
LSRIT	TPS	222.32	9.002	280
	Charter	213.83	5.529	6
	Total	222.15	9.020	286

Box's Test of Equality of Covariance Matrices

Box's M	13.011
F	1.666
df1	6
df2	406.229
Sig.	.128

Multivariate Tests

Effect	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared	Observed Power
Wilks' Lambda	.981	1.849	3.000	282.000	.138	.019	.478

Computed using alpha = .05

Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power
Corrected Model	RSRIT	255.692	1	255.692	2.269	.133	.008	.323
	MSRIT	431.329	1	431.329	2.381	.124	.008	.337
	LSRIT	423.574	1	423.574	5.285	.022	.018	.630

a. Computed using alpha = .05
b. R Squared = .008 (Adjusted R Squared = .004)
c. R Squared = .008 (Adjusted R Squared = .005)
d. R Squared = .018 (Adjusted R Squared = .015)

Charters vs. Statewide

Grade 4

Case Processing Summary

		Cases Valid N	Percent	Missing N	Percent	Total N	Percent
RSRIT	TPS	17515	94.2%	1086	5.8%	18601	100.0%
	Charter	250	86.8%	38	13.2%	288	100.0%
MSRIT	TPS	17515	94.2%	1086	5.8%	18601	100.0%
	Charter	250	86.8%	38	13.2%	288	100.0%
LSRIT	TPS	17515	94.2%	1086	5.8%	18601	100.0%
	Charter	250	86.8%	38	13.2%	288	100.0%

Distribution Normality

	Traditional Public School		Charter School	
RIT	Skewness	Kurtosis	Skewness	Kurtosis
Reading	-.044	-.107	-.039	.039
Math	.057	.299	.268	-.372
Language	-.089	.056	-.180	.244

Descriptive Statistics

		Mean	Std. Deviation	N
RSRIT	TPS	206.17	11.014	17515
	Charter	209.87	12.598	250
	Total	206.23	11.046	17765
MSRIT	TPS	211.73	10.972	17515
	Charter	215.81	13.617	250
	Total	211.79	11.023	17765
LSRIT	TPS	207.96	9.854	17515
	Charter	210.83	10.659	250
	Total	208.00	9.872	17765

Box's Test of Equality of Covariance Matrices

Box's M	58.177
F	9.654
df1	6
df2	1006924.326
Sig.	.000

Multivariate Tests

Effect	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared	Observed Power
Wilks' Lambda	.998	12.063	3.000	17761.000	.000	.002	1.000

Computed using alpha = .05

Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power
Corrected Model	RSRIT	3369.608	1	3369.608	27.658	.000	.002	1.000
	MSRIT	4100.041	1	4100.041	33.805	.000	.002	1.000
	LSRIT	2023.174	1	2023.174	20.784	.000	.001	.995

a. Computed using alpha = .05
b. R Squared = .002 (Adjusted R Squared = .001)
c. R Squared = .002 (Adjusted R Squared = .002)
d. R Squared = .001 (Adjusted R Squared = .001)

Grade 8

Case Processing Summary

		Cases					
		Valid		Missing		Total	
		N	Percent	N	Percent	N	Percent
RSRIT	TPS	18298	94.8%	1006	5.2%	19304	100.0%
	Charter	147	85.5%	25	14.5%	172	100.0%
MSRIT	TPS	18298	94.8%	1006	5.2%	19304	100.0%
	Charter	147	85.5%	25	14.5%	172	100.0%
LSRIT	TPS	18298	94.8%	1006	5.2%	19304	100.0%
	Charter	147	85.5%	25	14.5%	172	100.0%

Distribution Normality

	Traditional Public School		Charter School	
RIT	Skewness	Kurtosis	Skewness	Kurtosis
Reading	-.158	-.111	-.041	-.371
Math	.023	-.133	-.008	-.589
Language	-.130	.212	.034	-.467

Descriptive Statistics

		Mean	Std. Deviation	N
RSRIT	TPS	223.85	10.723	18298
	Charter	228.25	10.634	147
	Total	223.89	10.729	18445
MSRIT	TPS	234.02	13.673	18298
	Charter	237.94	14.352	147
	Total	234.05	13.683	18445
LSRIT	TPS	222.87	9.454	18298
	Charter	228.20	10.758	147
	Total	222.92	9.477	18445

Box's Test of Equality of Covariance Matrices

Box's M	11.731
F	1.941
df1	6
df2	345962.47
Sig.	.070

Multivariate Tests

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared	Observed Power
	Wilks' Lambda	.997	17.814	3.000	18441.000	.000	.003	1.000

Computed using alpha = .05

Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power
Corrected Model	RSRIT	2822.567	1	2822.567	24.551	.000	.001	.999
	MSRIT	2238.582	1	2238.582	11.964	.001	.001	.933
	LSRIT	4142.567	1	4142.567	46.236	.000	.003	1.000

a. Computed using alpha = .05
b. R Squared = .001 (Adjusted R Squared = .001)
c. R Squared = .003 (Adjusted R Squared = .002)

Grade 10

Case Processing Summary

		Cases Valid N	Percent	Missing N	Percent	Total N	Percent
RSRIT	TPS	16453	90.5%	1718	9.5%	18171	100.0%
	Charter	130	75.6%	42	24.4%	172	100.0%
MSRIT	TPS	16453	90.5%	1718	9.5%	18171	100.0%
	Charter	130	75.6%	42	24.4%	172	100.0%
LSRIT	TPS	16453	90.5%	1718	9.5%	18171	100.0%
	Charter	130	75.6%	42	24.4%	172	100.0%

Distribution Normality

	Traditional Public School		Charter School	
RIT	Skewness	Kurtosis	Skewness	Kurtosis
Reading	.059	-.100	-.129	.284
Math	.301	-.083	.018	-.227
Language	.148	.219	.027	.450

Descriptive Statistics

		Mean	Std. Deviation	N
RSRIT	TPS	229.64	8.663	16453
	Charter	234.53	8.951	130
	Total	229.68	8.676	16583
MSRIT	TPS	249.33	12.252	16453
	Charter	255.08	12.497	130
	Total	249.37	12.264	16583
LSRIT	TPS	227.50	8.534	16453
	Charter	232.17	9.407	130
	Total	227.53	8.551	16583

Box's Test of Equality of Covariance Matrices

Box's M	11.034
F	1.823
df1	6

	df2	270083.651
	Sig.	.090

Multivariate Tests

Effect	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared	Observed Power
Wilks' Lambda	.997	14.803	3.000	16579.000	.000	.003	1.000

Computed using alpha = .05

Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power
Corrected Model	RSRIT	3086.088	1	3086.088	41.097	.000	.002	1.000
	MSRIT	4267.033	1	4267.033	28.416	.000	.002	1.000
	LSRIT	2814.458	1	2814.458	38.583	.000	.002	1.000

a. Computed using alpha = .05
b. R Squared = .002 (Adjusted R Squared = .002)

Are some charters better than others?

Case Processing Summary

		Cases Valid N	Percent	Missing N	Percent	Total N	Percent
RSRIT	4	250	86.8%	38	13.2%	288	100.0%
	8	147	85.5%	25	14.5%	172	100.0%
	10	130	75.6%	42	24.4%	172	100.0%
MSRIT	4	250	86.8%	38	13.2%	288	100.0%
	8	147	85.5%	25	14.5%	172	100.0%
	10	130	75.6%	42	24.4%	172	100.0%
LSRIT	4	250	86.8%	38	13.2%	288	100.0%
	8	147	85.5%	25	14.5%	172	100.0%
	10	130	75.6%	42	24.4%	172	100.0%

Distribution Normality
Charter Schools

Grade 4

RIT	Skewness	Kurtosis
Reading	-.039	.039
Math	.268	-.372
Language	-.180	.244

Grade 8

RIT	Skewness	Kurtosis
Reading	-.041	-.371
Math	.008	-.589
Language	.034	-.467

Grade 10

RIT	Skewness	Kurtosis
Reading	-.129	.284
Math	.018	-.227
Language	.027	.450

Grade 4

Descriptive Statistics

	School Code	Mean	Std. Deviation	N
Reading				
	0237	189.88	10.521	8
	0264	212.50	10.124	26
	0540	207.58	12.389	118
	0623	208.89	11.372	19
	0624	215.67	12.612	6
	0625	210.72	10.309	32
	0813	213.55	11.888	20
	0819	221.52	9.389	21
	Total	209.87	12.598	250
Math	0237	205.38	15.399	8
	0264	225.46	12.984	26
	0540	209.83	11.924	118
	0623	217.53	10.410	19
	0624	214.83	13.227	6
	0625	225.69	13.150	32
	0813	221.60	10.811	20
	0819	219.57	8.925	21
	Total	215.81	13.617	250
Language	0237	195.63	8.484	8
	0264	213.69	9.490	26
	0540	209.49	10.938	118
	0623	211.11	8.672	19
	0624	213.17	14.386	6
	0625	210.97	10.190	32
	0813	212.90	7.966	20
	0819	217.48	8.370	21
	Total	210.83	10.659	250

Box's Test of Equality of Covariance Matrices

Box's M	48.183
F	1.035
df1	42
df2	4877.681
Sig.	.410

Multivariate Tests

Effect	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared	Observed Power
Wilks' Lambda	.495	9.121	21.000	689.701	.000	.209	1.000

Computed using alpha = .05

Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power
Corrected Model	RSRIT	7360.097	7	1051.442	7.912	.000	.186	1.000
	MSRIT	11663.449	7	1666.207	11.684	.000	.253	1.000
	LSRIT	3322.069	7	474.581	4.600	.000	.117	.994

a. Computed using alpha = .05
b. R Squared = .186 (Adjusted R Squared = .163)
c. R Squared = .253 (Adjusted R Squared = .231)
d. R Squared = .117 (Adjusted R Squared = .092)

Reading RIT
Tukey HSD

School Code	N	Subset 1	2	3
Blackfoot Charter Community Learning Center 0237	8	189.88		
Idaho Virtual Academy 0540	118		207.58	
Pocatello Charter School 0623	19		208.89	208.89
Nampa Charter School 0625	32		210.72	210.72
Hidden Springs Charter School 0264	26		212.50	212.50
Moscow Charter School 0813	20		213.55	213.55
Renaissance Public Charter School 0624	6		215.67	215.67
ANSER Charter	21			221.52

School 0819			
Sig.	1.000	.522	.053

Alpha = .05.

Math RIT
Tukey HSD

School Code	N	Subset 1	2	3
Blackfoot Charter Community Learning Center 0237	8	205.38		
Idaho Virtual Academy 0540	118	209.83	209.83	
Renaissance Public Charter School 0624	6	214.83	214.83	214.83
Pocatello Charter School 0623	19	217.53	217.53	217.53
ANSER Charter School 0819	21		219.57	219.57
Moscow Charter School 0813	20		221.60	221.60
Hidden Springs Charter School 0264	26			225.46
Nampa Charter School 0625	32			225.69
Sig.		.094	.118	.192

Alpha = .05.

Language RIT
Tukey HSD

School Code	N	Subset 1	2
Blackfoot Charter Community Learning Center 0237	8	195.63	
Idaho Virtual Academy 0540	118		209.49
Nampa Charter School 0625	32		210.97
Pocatello	19		211.11

Charter School 0623			
Moscow Charter School 0813	20		212.90
Renaissance Public Charter School 0624	6		213.17
Hidden Springs Charter School 0264	26		213.69
ANSER Charter School 0819	21		217.48
Sig.		1.000	.368

Alpha = .05.

Grade 8

Descriptive Statistics

	School Code	Mean	Std. Deviation	N
RSRIT	0264	231.50	13.461	18
	0265	218.17	7.705	6
	0539	219.60	8.678	5
	0623	223.93	8.506	15
	0624	221.38	7.836	8
	0625	229.42	12.412	31
	0626	230.27	8.575	64
	Total	228.25	10.634	147
MSRIT	0264	239.83	17.840	18
	0265	227.67	5.428	6
	0539	218.20	7.014	5
	0623	224.80	12.434	15
	0624	227.13	10.842	8
	0625	243.90	15.030	31
	0626	241.45	10.150	64
	Total	237.94	14.352	147
LSRIT	0264	228.44	11.628	18
	0265	213.83	5.529	6
	0539	216.60	2.702	5
	0623	221.67	7.374	15
	0624	218.88	8.459	8
	0625	229.68	12.438	31
	0626	232.37	8.048	64
	Total	228.20	10.758	147

Box's Test of Equality of Covariance Matrices

Box's M	70.610
F	1.657
df1	36

	df2	2135.205
	Sig.	.009

Multivariate Tests

Effect	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared	Observed Power
Wilks' Lambda	.562	4.900	18.000	390.808	.000	.175	1.000

Computed using alpha = .05

Multiple Comparisons

Dependent Variable		(I) School Code	(J) School Code	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
Reading RIT	Tamhane	0264	0265	13.33	4.468	.172	-2.79	29.46
			0539	11.90	5.013	.565	-8.20	32.00
			0623	7.57	3.859	.724	-5.24	20.37
			0624	10.12	4.212	.414	-4.30	24.55
			0625	2.08	3.878	1.000	-10.64	14.80
			0626	1.23	3.349	1.000	-10.29	12.76
		0265	0264	-13.33	4.468	.172	-29.46	2.79
			0539	-1.43	4.995	1.000	-23.00	20.13
			0623	-5.77	3.836	.976	-21.10	9.56
			0624	-3.21	4.192	1.000	-19.58	13.17
			0625	-11.25	3.855	.259	-26.39	3.88
			0626	-12.10	3.323	.193	-28.39	4.20
		0539	0264	-11.90	5.013	.565	-32.00	8.20
			0265	1.43	4.995	1.000	-20.13	23.00
			0623	-4.33	4.459	1.000	-25.25	16.58
			0624	-1.78	4.768	1.000	-22.59	19.04
			0625	-9.82	4.475	.753	-30.51	10.87
			0626	-10.67	4.026	.653	-34.72	13.39
		0623	0264	-7.57	3.859	.724	-20.37	5.24
			0265	5.77	3.836	.976	-9.56	21.10
			0539	4.33	4.459	1.000	-16.58	25.25
			0624	2.56	3.536	1.000	-10.22	15.33
			0625	-5.49	3.129	.854	-15.64	4.66
			0626	-6.33	2.444	.302	-14.74	2.07
		0624	0264	-10.12	4.212	.414	-24.55	4.30
			0265	3.21	4.192	1.000	-13.17	19.58
			0539	1.78	4.768	1.000	-19.04	22.59
			0623	-2.56	3.536	1.000	-15.33	10.22
			0625	-8.04	3.556	.545	-20.65	4.56
			0626	-8.89	2.971	.268	-21.15	3.37
		0625	0264	-2.08	3.878	1.000	-14.80	10.64
			0265	11.25	3.855	.259	-3.88	26.39
			0539	9.82	4.475	.753	-10.87	30.51
			0623	5.49	3.129	.854	-4.66	15.64
			0624	8.04	3.556	.545	-4.56	20.65
			0626	-.85	2.474	1.000	-8.80	7.10

		0626	0264	-1.23	3.349	1.000	-12.76	10.29
			0265	12.10	3.323	.193	-4.20	28.39
			0539	10.67	4.026	.653	-13.39	34.72
			0623	6.33	2.444	.302	-2.07	14.74
			0624	8.89	2.971	.268	-3.37	21.15
			0625	.85	2.474	1.000	-7.10	8.80
Math RIT	Tamhane	0264	0265	12.17	4.753	.315	-4.10	28.43
			0539	21.63	5.246	.014	3.13	40.14
			0623	15.03	5.290	.155	-2.47	32.53
			0624	12.71	5.690	.541	-6.85	32.26
			0625	-4.07	4.997	1.000	-20.56	12.42
			0626	-1.62	4.392	1.000	-16.82	13.58
		0265	0264	-12.17	4.753	.315	-28.43	4.10
			0539	9.47	3.841	.585	-7.71	26.65
			0623	2.87	3.901	1.000	-10.79	16.53
			0624	.54	4.428	1.000	-16.87	17.95
			0625	-16.24	3.493	.002	-28.15	-4.32
			0626	-13.79	2.554	.010	-24.53	-3.05
		0539	0264	-21.63	5.246	.014	-40.14	-3.13
			0265	-9.47	3.841	.585	-26.65	7.71
			0623	-6.60	4.489	.978	-23.49	10.29
			0624	-8.93	4.953	.888	-28.32	10.47
			0625	-25.70	4.138	.001	-41.76	-9.64
			0626	-23.25	3.384	.015	-41.32	-5.19
		0623	0264	-15.03	5.290	.155	-32.53	2.47
			0265	-2.87	3.901	1.000	-16.53	10.79
			0539	6.60	4.489	.978	-10.29	23.49
			0624	-2.32	5.000	1.000	-20.23	15.58
			0625	-19.10	4.194	.001	-32.87	-5.34
			0626	-16.65	3.452	.003	-28.74	-4.56
		0624	0264	-12.71	5.690	.541	-32.26	6.85
			0265	-.54	4.428	1.000	-17.95	16.87
			0539	8.93	4.953	.888	-10.47	28.32
			0623	2.32	5.000	1.000	-15.58	20.23
			0625	-16.78	4.688	.057	-33.87	.31
			0626	-14.33	4.038	.131	-31.41	2.75
		0625	0264	4.07	4.997	1.000	-12.42	20.56
			0265	16.24	3.493	.002	4.32	28.15
			0539	25.70	4.138	.001	9.64	41.76
			0623	19.10	4.194	.001	5.34	32.87
			0624	16.78	4.688	.057	-.31	33.87
			0626	2.45	2.983	1.000	-7.15	12.05
		0626	0264	1.62	4.392	1.000	-13.58	16.82
			0265	13.79	2.554	.010	3.05	24.53
			0539	23.25	3.384	.015	5.19	41.32
			0623	16.65	3.452	.003	4.56	28.74
			0624	14.33	4.038	.131	-2.75	31.41
			0625	-2.45	2.983	1.000	-12.05	7.15
Language RIT	Tamhane	0264	0265	14.61	3.550	.013	2.18	27.04
			0539	11.84	2.995	.015	1.53	22.16
			0623	6.78	3.337	.670	-4.30	17.85
			0624	9.57	4.057	.468	-4.67	23.81
			0625	-1.23	3.536	1.000	-12.72	10.25
			0626	-3.93	2.919	.989	-13.93	6.07
		0265	0264	-14.61	3.550	.013	-27.04	-2.18
			0539	-2.77	2.560	1.000	-14.21	8.68
			0623	-7.83	2.953	.354	-19.02	3.36

	0624	-5.04	3.747	.992	-19.40	9.31
	0625	-15.84	3.176	.002	-27.14	-4.54
	0626	-18.54	2.471	.003	-29.82	-7.26
0539	0264	-11.84	2.995	.015	-22.16	-1.53
	0265	2.77	2.560	1.000	-8.68	14.21
	0623	-5.07	2.255	.554	-13.04	2.90
	0624	-2.28	3.226	1.000	-15.67	11.12
	0625	-13.08	2.540	.000	-21.47	-4.69
	0626	-15.77	1.572	.000	-21.90	-9.65
0623	0264	-6.78	3.337	.670	-17.85	4.30
	0265	7.83	2.953	.354	-3.36	19.02
	0539	5.07	2.255	.554	-2.90	13.04
	0624	2.79	3.545	1.000	-10.55	16.13
	0625	-8.01	2.935	.177	-17.48	1.46
	0626	-10.71	2.153	.001	-18.06	-3.36
0624	0264	-9.57	4.057	.468	-23.81	4.67
	0265	5.04	3.747	.992	-9.31	19.40
	0539	2.28	3.226	1.000	-11.12	15.67
	0623	-2.79	3.545	1.000	-16.13	10.55
	0625	-10.80	3.733	.202	-24.24	2.63
	0626	-13.50	3.155	.046	-26.82	-.18
0625	0264	1.23	3.536	1.000	-10.25	12.72
	0265	15.84	3.176	.002	4.54	27.14
	0539	13.08	2.540	.000	4.69	21.47
	0623	8.01	2.935	.177	-1.46	17.48
	0624	10.80	3.733	.202	-2.63	24.24
	0626	-2.70	2.450	.999	-10.59	5.20
0626	0264	3.93	2.919	.989	-6.07	13.93
	0265	18.54	2.471	.003	7.26	29.82
	0539	15.77	1.572	.000	9.65	21.90
	0623	10.71	2.153	.001	3.36	18.06
	0624	13.50	3.155	.046	.18	26.82
	0625	2.70	2.450	.999	-5.20	10.59

Based on observed means.
* The mean difference is significant at the .05 level.

Reading RIT

	School Code	N	Subset 1	2
Tukey HSD	0265	6	218.17	
	0539	5	219.60	219.60
	0624	8	221.38	221.38
	0623	15	223.93	223.93
	0625	31	229.42	229.42
	0626	64	230.27	230.27
	0264	18		231.50
	Sig.		.095	.106

Alpha = .05.

Math RIT

School Code	N	Subset 1	2	3	4

Tukey HSD	0539	5	218.20			
	0623	15	224.80	224.80		
	0624	8	227.13	227.13	227.13	
	0265	6	227.67	227.67	227.67	227.67
	0264	18		239.83	239.83	239.83
	0626	64			241.45	241.45
	0625	31				243.90
	Sig.		.593	.092	.126	.052

Alpha = .05.

Language RIT

	School Code	N	Subset 1	2	3	4
Tukey HSD	0265	6	213.83			
	0539	5	216.60	216.60		
	0624	8	218.88	218.88	218.88	
	0623	15	221.67	221.67	221.67	221.67
	0264	18		228.44	228.44	228.44
	0625	31			229.68	229.68
	0626	64				232.37
	Sig.		.478	.066	.124	.131

Alpha = .05.

Grade 10

Descriptive Statistics

	School Code	Mean	Std. Deviation	N
RSRIT	0257	236.67	8.068	45
	0539	229.79	9.467	19
	0624	227.00	10.085	8
	0625	231.46	7.774	24
	0626	238.29	7.713	34
	Total	234.53	8.951	130
MSRIT	0257	259.29	10.623	45
	0539	245.37	10.505	19
	0624	241.63	10.405	8
	0625	252.00	12.438	24
	0626	260.26	10.587	34
	Total	255.08	12.497	130
LSRIT	0257	234.80	8.409	45
	0539	227.47	10.308	19
	0624	222.50	9.725	8
	0625	228.00	7.791	24
	0626	236.53	7.370	34
	Total	232.17	9.407	130

Box's Test of Equality of Covariance Matrices

Box's M	29.715
F	1.136
df1	24

	df2	5088.343				
	Sig.	.293				

Multivariate Tests

Effect	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared	Observed Power
Wilks' Lambda	.699	3.941	12.000	325.719	.000	.113	.997

Computed using alpha = .05

Reading

School Code	N	Subset 1	2	3
0624	8	227.00		
0539	19	229.79	229.79	
0625	24	231.46	231.46	231.46
0257	45		236.67	236.67
0626	34			238.29
Sig.		.476	.091	.094

Alpha = .05.

Math

School Code	N	Subset 1	2	3
0624	8	241.63		
0539	19	245.37	245.37	
0625	24		252.00	252.00
0257	45			259.29
0626	34			260.26
Sig.		.837	.355	.154

Alpha = .05.

Language

School Code	N	Subset 1	2	3
0624	8	222.50		
0539	19	227.47	227.47	
0625	24	228.00	228.00	
0257	45		234.80	234.80
0626	34			236.53
Sig.		.280	.069	.971

Alpha = .05.

Appendix B
Charter School ISAT Mean Scores
Alphabetic by Grade

ANSER Charter School Gr 4	Boise	221.52	219.57	217.48
Blackfoot Charter Community Learning Center Gr 4	Blackfoot	189.88	205.38	195.63
Hidden Springs Charter School Gr 4	Boise	212.5	225.46	213.69
Idaho Virtual Academy Gr 4	Butte	207.58	209.83	209.49
Liberty Charter School Gr 4	Nampa	210.72	225.69	210.97
Moscow Charter School Gr 4	Moscow	213.55	221.6	212.9
Pocatello Community Charter School Gr 4	Pocatello	208.89	217.53	211.11
Renaissance Charter School Gr 4	Moscow	215.67	214.83	213.17
Coeur d'Alene Charter Academy Gr 8	Coeur d'Alene	230.27	241.45	232.37
Hidden Springs Charter School Gr 8	Boise	231.5	239.83	228.44
Liberty Charter School Gr 8	Nampa	229.42	243.9	229.68
Pocatello Community Charter School Gr 8	Pocatello	223.93	224.8	221.67
Renaissance Charter School Gr 8	Moscow	221.38	227.13	218.88
Sandpoint Charter School Gr 8	Lake Pend Oreille	218.17	227.67	213.83
Coeur d'Alene Charter Academy Gr 10	Coeur d'Alene	238.29	260.26	236.53
Idaho Leadership Academy Gr 10	Snake River	229.79	245.37	227.47
Liberty Charter School Gr 10	Nampa	231.46	252	228
Meridian Charter High School Gr 10	Meridian	236.67	259.29	234.8
Renaissance Charter School Gr 10	Moscow	227	241.63	222.5
Idaho Virtual High School Gr 10	Mountain Home	No Data	No Data	No Data
Meridian Medical Arts Charter High School	Meridian	No Data	No Data	No Data
North Star Charter School	Meridian	No Data	No Data	No Data
White Pine Charter School	Bonneville	No Data	No Data	No Data

References

Huck, S. W. (2004). *Reading Statistics and Research* (4th ed.). Washington DC: American Psychological Association.

Green, S. B., & Salkind (2003). *Using SPSS* (3rd ed.). Upper Saddle River, New Jersey: Prentice Hall.

Idaho Charters (2004) Retrieved May 15, 2004, from http://csi.boisestate.edu/icsn/idaho_charters.htm.

Idaho State Board of Education. (n.d.). Retrieved July 25, 2004 from http://www.idahoboardofed.org/

Idaho State Department of Education. (n.d.). Retrieved July 25, 2004 from http://www.sde.state.id.us/admin/isat/

Mauer, C. M. (2003). Elements leading to the effectiveness of two diverse charter schools [Diss]. *Unpublished doctoral dissertation*. Moscow, ID: University of Idaho.

Miller, R. L. (2003). A study of differences in achievement between Idaho charter schools and their constituent school districts: exploring and controlling demographics [Diss]. *Unpublished doctoral dissertation*., Moscow, ID: University of Idaho.

Northwest Evaluation Association. (n.d.). Retrieved July 25, 2004, from http://www.nwea.org/tools/lc/intro.asp

Stevens, J. P. (2002). *Applied multivariate statistics for the social sciences* (4th ed.). Mahwah NJ: Lawrence Erlbaum Associates.

The Education Trust. (2004). *Good Teaching Matters*. Retrieved June 15, 2004, from www.edtrust.org.